

Decomposable representations of surface groups

Florent Schaffhauser
(Keio University, Japan)

October 31, 2008

In this talk, we generalize to arbitrary surface groups and arbitrary compact connected Lie groups the notion of decomposable representation, first introduced by Falbel and Wentworth for unitary representations of the punctured sphere group. We show that such decomposable representations are the elements of the fixed-point set of an anti-symplectic involution defined on the moduli space of representations, forming therefore a Lagrangian submanifold of this moduli space. The existence of decomposable representations is obtained as a corollary of a real convexity theorem for group-valued momentum maps.

1:00 p.m.
Math 520
Columbia University